

# PRESSURE

## Compact Pressure Switches Series 8000

**NEW**  
**universal,**  
**modular**  
**construction,**  
**0,2 ...600 bar**



switch

control

measure

**Barksdale**

CONTROL PRODUCTS

**CRANE** Barksdale, Inc./Barksdale GmbH  
A Subsidiary of Crane Co.

# Compact Pressure Switch Series 8000

## Technical Data

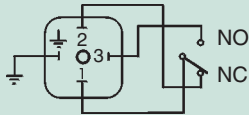
Series 8000 - the successor of the product lines XTM, XTK, X1T and 96200 - providing additional advantages:

- extremely low and precise setpoint adjustment
- the electrical connection can be aligned in any direction, as the threaded fitting can be rotated in the housing by 360°
- Stainless Steel pistons allow water- and oil applications

Repeatability	: ±1% typical, piston switch ±2% typical, diaphragm switch
Switching Frequency	: max. 60/min piston switch max. 30/min diaphragm switch
Temperature Range	: -40°C ...+80°C piston switch -20°C ...+80°C diaphragm switch -50°C on request
Housing	: Aluminum die-cast 230
Wetted Parts	: NBR, Turcon and Stainless Steel - optional : Viton, EPDM instead of NBR
Pressure Connection	: CETOP flange, bolt circle 44 mm G1/4 F 1/4" NPT F
Electrical Connection	: Plug connector DIN 43650 A (large)
Microswitch	: SPDT contact
Protection Class	- Standard : IP65 (plug), IP68 (cable) - optional : Intrinsically safe $\text{Ex}$ II 1GD EExia IIB T6 (DIN plug) EExib IIC T6 (cable) Please add 'EXI' to your ordering details when placing an order.
Total Weight	: CETOP flange model: 350 g Thread connection model: 400 g



**Wiring Code for all Types**  
(contact status at atmospheric pressure)



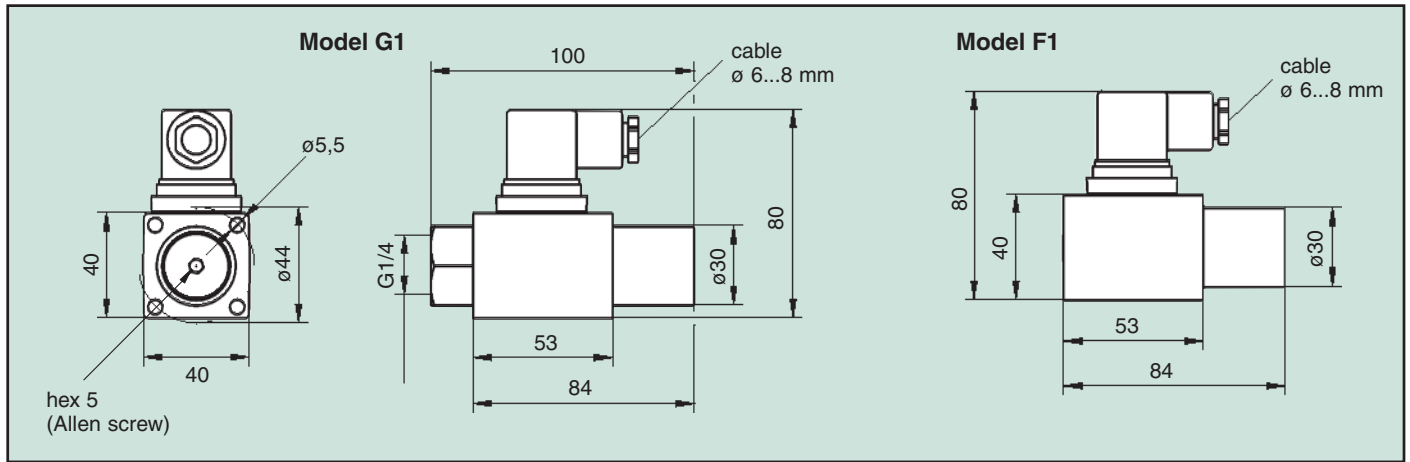
## Adjustable Ranges and Proof Pressures

Pressure Range Code	Adjustable Ranges bar	Adjustable Ranges (decreasing pressure) bar	Adjustable Ranges (increasing pressure) bar	Hysteresis bar	Proof Pressure bar
	<b>Diaphragm</b>				
1	0,2...0,8	0,1...0,7	0,2...0,9	0,08...0,2	80 <sup>(1)</sup>
2	0,4...4,0	0,3...6,0	0,4...7,0	1,0...0,5	80 <sup>(1)</sup>
3	2,0...16	2,0...20	2,5...23	0,2...1,5	80 <sup>(1)</sup>
4	4,0...40	2,0...48	2,0...50	0,4...3,5	80 <sup>(1)</sup>
	<b>Piston</b>				
5	5,0...160	3,0...190	5,0...200	2,5...25	600
6	20...350	7,0...300	10...350	3,5...50	600
7	50...600			10...70	900

(1): Proof pressure 200 bar on request (May shorten the lifetime of the switch).

# Compact Pressure Switch Series 8000

## Dimensions (in mm)



## Electrical Ratings

Silver contacts	Inductive load	Resistive load	Gold plated contacts	Resistive load
30 V =	3,0 A	4,0 A	30 V =	0,1 A
250 V =	0,2 A	0,2 A	8 V =	0,1 A
250 V~	2,0 A	3,0 A	125 V~	0,1 A
125 V~	3,0 A	5,0 A	<b>Intrinsically safe EExia</b>	
Min. applicable load 160 mA at 5 V DC			Umax = 28 V	I <sub>max</sub> = 50 mA

## Order Codes

Standard Model:		CETOP 40 x 40 Flange		G 1/4 F		1/4" NPTF	
Housing:	Aluminum die-cast	Art. No.	Order Code	Art. No.	Order Code	Art. No.	Order Code
Microswitch:	Silver contacts	0417-011	811-PL1-1-B-00	0417-018	821-PL1-1-B-00	0417-025	841-PL1-1-B-00
Process Conn.:	V2A 1.4301 / 304SS	0417-012	812-PL1-1-B-00	0417-019	822-PL1-1-B-00	0417-026	842-PL1-1-B-00
Diaphragm:	NBR	0417-013	813-PL1-1-B-00	0417-020	823-PL1-1-B-00	0417-027	843-PL1-1-B-00
Piston:	V2A 1.4301 / 304SS	0417-014	814-PL1-1-B-00	0417-021	824-PL1-1-B-00	0417-028	844-PL1-1-B-00
Seal:	Turcon/ NBR	0417-015	815-PL1-1-B-00	0417-022	825-PL1-1-B-00	0417-029	845-PL1-1-B-00
Electrical Conn.:	Plug DIN 43650 A	0417-016	816-PL1-1-B-00	0417-023	826-PL1-1-B-00	0417-030	846-PL1-1-B-00
Adjustm. Screw:	Allen screw hex 5	0417-017	817-PL1-1-B-00	0417-024	827-PL1-1-B-00	0417-031	847-PL1-1-B-00

## Order Number Key / Options (Example) 8 1 7 - PL1 - 1 - B - 00 (green = standard) \* on request

### Series 8000

### Pressure Connections:

Special connect. / not standard	0*
Cetop connection flange 40 x 40	1
G1/4 F (BSP)	2
G1/4 M (BSP)	3*
1/4" NPT F	4
1/4" NPT M	5*

### Measur. Range Proof Press.

1 = 0,2...0,8 bar	80 bar
2 = 0,4...4,0 bar	80 bar
3 = 2,0...16 bar	80 bar
4 = 3,0...40 bar	80 bar
5 = 5,0...160 bar	600 bar
6 = 20...350 bar	600 bar
7 = 50...600 bar	900 bar

### Electrical Connections:

Plug DIN 43650 A, Pg9	PL1
Plug M12, 4 pin without female plug	PL2
Plug M12, 4 pin with 90° plug, 2 m cable	PL3
Plug Bayonet DIN 72585 without female plug	PL4*
IP68 cable gland, 2 m cable	CA1
1/2" NPT F with 60 cm leads	CD1*

### More Options:

Intrinsically safe EEx ia	- EXI
Shipboard approval GL	- GL
UL approval Nema 4	- UL

### Adjustment:

Allen screw	0
Adjustm. knob with scale	1*

### Housing:

Housing standard	0
Housing powder coated	1*

### Seals:

NBR (Buna)	B
Viton	V
EPDM	E*
Neoprene	N*

### Contacts:

Silver	1
Gold-plated	2

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Subject to technical changes.